

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method for modulating the inflammatory response of a mesenchymal cell comprising administering use of an effective amount of an agent that can modulate an IgA receptor on a mesenchymal cell to a cell or animal in need thereof ~~for the manufacture of a medicament to modulate the inflammatory responses of a mesenchymal cell.~~
2. (Currently amended) A method use according to claim 1 to inhibit the inflammatory responses of a mesenchymal cell.
3. (Currently amended) A method use according to claim 2 to treat an inflammatory condition caused by an IgA binding to an IgA receptor on a mesenchymal cell.
4. (Currently amended) A method use according to claim 3 wherein the inflammatory condition is arthritis.
5. (Currently amended) A method use according to claim 4 wherein the arthritides is selected from rheumatoid arthritis, osteoarthritis or a spondyloarthropathy.
6. (Currently amended) A method use according to claim 3 wherein the inflammatory condition is selected from Crohn's disease, ulcerative colitis, Behcet's disease, Sjogren's disease and a vasculitis.
7. (Currently amended) A method use according to claim 3 wherein the condition is asthma, chronic bronchitis, acute bronchitis, bronchial hyperreactivity, chronic obstructive pulmonary disease, emphysema, interstitial lung disease, bronchiectasis or airway remodelling.

8. (Currently amended) A method for modulating cytosolic calcium signalling in a mesenchymal cell comprising administering use of an effective amount of an agent in ~~the manufacture of a medicament~~ that can modulate an IgA receptor on a mesenchymal cell to a cell or animal in need thereof ~~to modulate cytosolic calcium signalling in a mesenchymal cell.~~

9. (Currently amended) A method use according to claim 8 comprising administering an effective amount of an IgA receptor antagonist to prevent or inhibit intracellular calcium signalling in a mesenchymal cell.

10. (Currently amended) A method for inhibiting the contraction of a mesenchymal cell comprising administering use of an effective amount of an IgA receptor antagonist to a cell or animal in need thereof ~~in the manufacture of a medicament to inhibit the contraction of a mesenchymal cell.~~

11. (Currently amended) A method for inhibiting the production of inflammatory mediators or growth factors comprising administering use of an effective amount of an IgA receptor antagonist to a cell or animal in need thereof ~~in the manufacture of a medicament to inhibit the production of inflammatory mediators or growth factors.~~

12. (Currently amended) A method use according to ~~any one of claims~~ claim 1 to 14 wherein the IgA receptor is pIgR or FcαR.

13. (Currently amended) A method use according to ~~any one of claims~~ claim 2 to 42 wherein the IgA receptor antagonist inhibits the binding of pIgA to pIgR.

14. (Currently amended) A method use according to ~~any one of claims~~ claim 2 to 42 wherein the IgA receptor antagonist inhibits the binding of pIgA to FcαR.

15. (Currently amended) A method use according to ~~any one of claims~~ claim 2 to 14 wherein the IgA receptor antagonist is a scFv that binds pIgR or Fc α R.

16. (Currently amended) A method use according to ~~any one of claims~~ claim 1 to 15 wherein the mesenchymal cell is a smooth muscle cell.

17. (Currently amended) A method use according to claim 16 wherein the cell is an airway smooth muscle cell.

18. (Currently amended) A method use according to ~~any one of claims~~ claim 1 to 15 wherein the mesenchymal cell is a fibroblast.

19. (Currently amended) A method use according to claim 18 wherein the cell is a synovial fibroblast.

20. (Original) A method of delivering a substance to a mesenchymal cell comprising administering to an animal or cell in need thereof an effective amount of a conjugate comprising the substance coupled to an IgA receptor ligand.

21. (Original) A method according to claim 20 wherein the IgA receptor is pIgR or Fc α R.

22. (Currently amended) A method according to claim 20 ~~or 24~~ wherein the mesenchymal cell is a fibroblast or smooth muscle cell.

23. (Original) A method of detecting a condition associated with the activation of a mesenchymal IgA receptor on a mesenchymal cell comprising assaying a tissue sample or cells from the sample for (a) a nucleic acid molecule encoding an IgA receptor or a fragment thereof or (b) an IgA receptor or a fragment thereof.

24. (Original) A method according to claim 23 wherein the IgA receptor is pIgR or

Fc α R.

25. (Currently amended) A method according to claim 23 ~~or~~ 24 wherein the condition is an inflammatory condition selected from arthritides, including rheumatoid arthritis, osteoarthritis, spondyloarthropathies, Crohn's disease, ulcerative colitis, Behcet's disease, Sjogren's disease and vasculitides.

26. (Currently amended) A method according to claim 23 ~~or~~ 24 wherein the condition is asthma, chronic bronchitis, acute bronchitis, bronchial hyperreactivity, chronic obstructive pulmonary disease, emphysema, interstitial lung disease, bronchiectasis or airway remodelling.

27. (Original) A method of detecting IgA mediated bronchial hyperreactivity comprising:

- (a) administering an IgA receptor agonist to a patient; and
- (b) detecting bronchoconstriction in the patient wherein an increase in bronchoconstriction as compared to a control indicates that the patient has IgA-mediated hyperreactivity.

28. (Original) A method according to claim 27 wherein bronchoconstriction is measured by listening for wheezing on chest auscultation.

29. (Original) A method according to claim 27 wherein bronchoconstriction is measured by measuring a reduced forced expiratory volume at 1 second (FEV1).

30. (Original) A method of detecting IgA-mediated bronchial hyperreactivity comprising:

- (a) administering an IgA-receptor agonist to a patient and detecting bronchoconstriction; and
- (b) administering an IgA receptor agonist followed by a non-specific bronchoconstricting agent to the patient and detecting bronchoconstriction at a lower

dose than when the nonspecific agent is administered alone wherein bronchoconstriction in step (a) and/or bronchoconstriction induced at a lower dose of the nonspecific agent administered without the IgA receptor agonist in step (b) would indicate that the patient has IgA-mediated bronchial hyperreactivity.

31. (Original) A method according to claim 30 wherein the non-specific bronchoconstricting agent is methacholine or histamine.

32. (Currently amended) A method according to claim 30 ~~or 31~~ wherein bronchoconstriction is detected with a pulmonary function test such as clinical spirometry [=measurement of FEV1 and FVC].